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Consumers' Guide

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State Research on Home Problems

Consumers' Queries and Comments

"America's contribution in 1787 to world governmental practice was enormously significant. It is my belief that in the spirit if not in the form of 1787, the United States can in the not too distant future make again fully as great a contribution to the productivity and welfare of the peoples of the world and perhaps an even greater contribution to the consuming power and happiness of all the nations"

Henry A. Wallace
Secretary of Agriculture

CC FROM an Iowa consumer: "I had a strange experience lately. I had been getting milk from my son's Jersey cow. I churned some of the cream and kept myself in excellent butter. When his cow failed I planned to buy whipping cream and churn it. But no, it would not make butter. I treated it just as I had all the different creams from all the different cows from which I had churned, but it simply would not change into butter. I decided, since I know few consumers churn in these days, that the dairymen had found a secret to please--and were pleasing--their customers who wanted not churning cream but whipping cream. Could the answer lie in the homogenizing process reported in the GUIDE as being used on cream nowadays?"

HOMOGENIZING would prevent cream from churning into butter, say the experts of the Bureau of Dairy Industry, but dairymen are not likely to homogenize whipping cream. The process consists of subjecting the cream to high pressures, breaking the fat globules into tinier particles so that they do not rise to the surface. Since it prevents the cream from bubbling up and foaming into increased volume, it is not suitable for whipping cream.

CAUSES for creams not churning into butter are published in Farmers' Bulletin No. 876, "Making Butter on the Farm", which may be obtained by writing to the Office of Information, United States Department of Agriculture, Washington, D. C. Since a dry feed diet of the dairy cows could influence the churnability of their cream, there is a possibility that the drought situation might play its part in this particular problem.

CC "WHEN I BUY sweetened grapefruit juice", asks an eastern city consumer, "am I buying as potent a product as unsweetened juice? What is to prevent a canner from sweetening his juice, not with sugar, but with a watery sugar sirup which would result in my spending more of my juice money for water?"

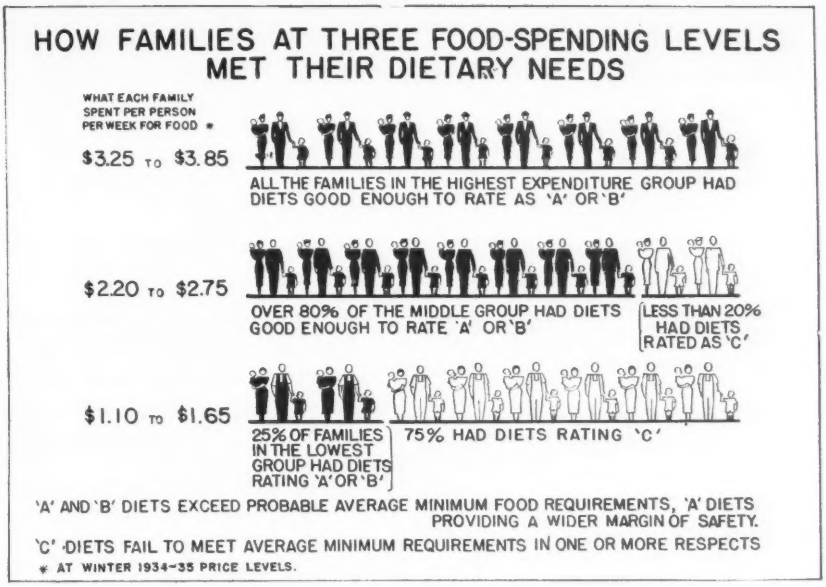
UP TO July 1, there was nothing specific in Federal regulations to prevent this dilution, and some cans of fruit juice were diluted as much as 25 percent by the addition of sugar syrup. They were labeled in such a way that this dilution was not obvious to the label-reading consumer.

FOOD AND DRUG officials ruled that under the necessity of maintaining the identity of such basic food products as fruit juice as distinguished from fruit sirups, fruit type beverages, and the like, these juices if sweetened must be sweetened with dry sugar, and conspicuously labeled to show the addition of sugar.

CC "FRENCH FRIED POTATOES", writes a New York consumer, "are a gamble in our house. Sometimes they have the light, golden brown color they should have, and taste delicious. Then again, the next time they may be off in color and taste and texture. I buy carefully, and if I have room in my refrigerator I even give potatoes the extra care I give green vegetables--keep them in the ice box between buying and using. I've tried several kinds of potatoes and it doesn't seem to help."

REFRIGERATION may be the secret of the trouble. Potatoes should be kept out of the refrigerator for best cooking quality. Scientists in the Bureau of Plant Industry, in seeking the solution to a similar problem troubling potato-chip manufacturers, found that potatoes stored at temperatures of 60 degrees to 70 degrees yielded good chips, while those stored at lower temperatures were unsatisfactory. These results hold good for French fried and baked potatoes as well as potato chips. Good practice for consumers is to store potatoes at room temperature, avoiding extremes of hot and cold. (See "How Do You Store?" in your CONSUMERS' GUIDE for Sept. 2, 1935.)

Supplying Food For Adequate Consumption


HOW FAMILIES AT THREE FOOD-SPENDING LEVELS MET THEIR DIETARY NEEDS
WHAT EACH FAMILY SPENT PER PERSON PER WEEK FOR FOOD *
$3.25 TO $3.85
ALL THE FAMILIES IN THE HIGHEST EXPENDITURE GROUP HAD DIETS GOOD ENOUGH TO RATE AS 'A' OR 'B'
$2.20 TO $2.75
OVER 80% OF THE MIDDLE GROUP HAD DIETS GOOD ENOUGH TO RATE 'A' OR 'B'
LESS THAN 20% HAD DIETS RATED AS 'C'
$1.10 TO $1.65
25% OF FAMILIES IN THE LOWEST GROUP HAD DIETS RATING 'A' OR 'B'
75% HAD DIETS RATING 'C'
'A' AND 'B' DIETS EXCEED PROBABLE AVERAGE MINIMUM FOOD REQUIREMENTS, 'A' DIETS PROVIDING A WIDER MARGIN OF SAFETY.
'C' DIETS FAIL TO MEET AVERAGE MINIMUM REQUIREMENTS IN ONE OR MORE RESPECTS
* AT WINTER 1934-35 PRICE LEVELS.

Studies showing how well workers feed their families at different low income levels add another chapter to the knowledge of present and potential markets for American agriculture.

AMERICANS may be the best fed people in the world, but many of them need more food to bring our country as a whole up to the standard nutritionists would set for "optimum nutrition". A fairly large percentage of those with low incomes fail to get diets adequate for health, according to the first reports from a new study of eating habits of workers and their families made by the Bureau of Labor Statistics and the Bureau of Home Economics.

COLD FIGURES now prove what has long seemed obvious to first-hand observers who could not back up their impressions with official statistics: That income is a factor at the root of the nutrition problem. Another natural guess takes on official status as a fact with this study. Though the figures show clearly that more money means better nutrition, the nutrition specialists of the Bureau of Home Economics who analyzed the expenditure figures find also a basis for the conclusion that in many cases modern knowledge of food values could make the same expenditures go further toward the goal of adequate nourishment.

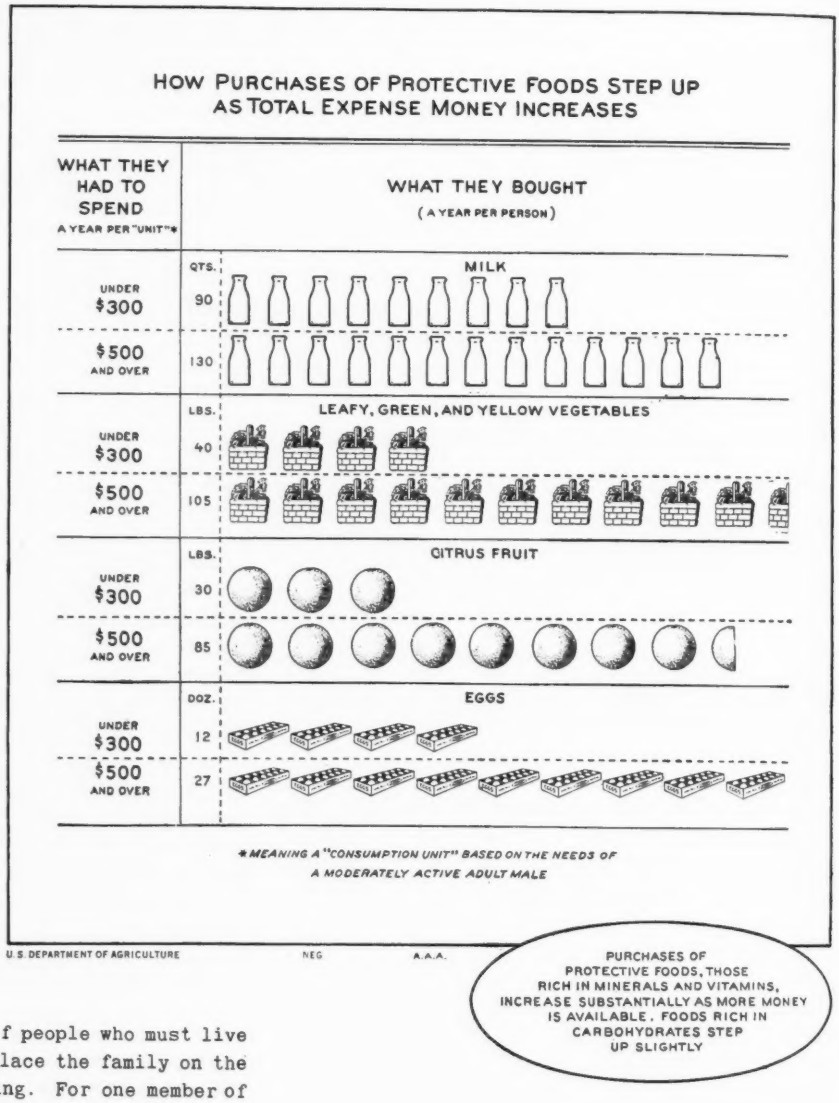
MORE COMPLETE statistical information on how well fed America is in general these days must wait for the results of the nation-wide study of consumption at all levels of income, now being carried on cooperatively by the National Resources Committee, the U. S. Department of Labor, the Bureau of Home Economics in the Department of Agriculture, and the Works Progress Administration. Necessary background for any picture of agriculture's present and future job of feeding America, it is essential for work in other directions, too. Government agencies, social workers, economists, legislators, business men, scientific researchers, labor leaders—these are a few of the experts who are waiting for a realistic, statistical picture of America's level of living, not as it could or should be but as it actually is today.

SLICING off the bottom layer of this picture, two Government bureaus have given us a foretaste of what the results of the larger survey may be among the lower income levels. During 1933-34, the Bureau of Labor Statistics made a survey in a large number of cities of the way wage-earners and lower-salaried clerical workers spend their money. A thorough investigation was necessary in order to bring up to date the index of living costs which the Bureau publishes twice a

year. The survey throws no light on the situation of the unemployed, of people receiving relief, or of those with incomes of less than $500 a year. Only families boasting at least one member who had worked over a thousand hours in at least 36 weeks of the year were included.

SPOTLIGHTS on this survey from several angles have brought out certain facts about how people in the lower income brackets budget their expenditures. In one analysis the figures on spending habits of families in 11 New Hampshire communities were studied to find out how families at different levels of economic well-being divided up their expenditures among their various needs.

MEASURING the level of economic well-being presented problems. It is not enough to bracket families merely by the total amount of money coming in and being used for their expenses. For a family with $1,500 a year to spend on the needs of only two people is probably better off than a family with $2,000 to spend on five people. But it is still not enough to divide the income by the number of people who must live on it and let the answer place the family on the scale of economic well-being. For one member of the family may need more or less than another, depending on factors like occupation, age, sex, and social custom. Some way of comparing the well-being of families not only of different size but of different composition had to be found. The answer was the "consumption unit". Taking the expenses of a moderately active man as the yardstick, the expenses of other types of people were figured as percentages of this yardstick. Families could be compared fairly after they had been calculated into the number of equivalent "consumption units". One family of six, by this method, might add up statistically to 5.5 consumption units, while another with members of different ages and needs might total only 4.2 consumption units. Classifying the families by the amount of money available for each "consumption unit" put them in their true place on the scale of economic well-being.

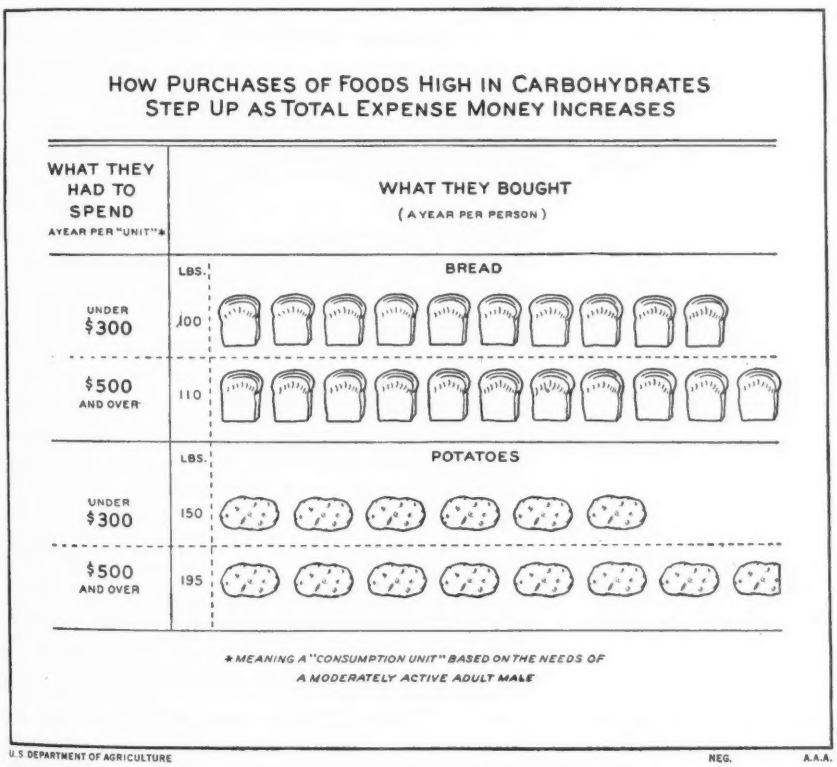


LINE between two levels of economic well-being was drawn in this analysis at an expenditure of $400 per year for all needs of each "consumption unit" in the family. Naturally the large families with small incomes landed below the dividing line. The analysis showed that these families spent less money apiece for feeding each member of the family, but their total food expenditure for the whole family was higher than the average above the line because the families were larger. The families above the line could spend more for each "consumption unit" and still not have to give up so large a chunk of the weekly payroll for food. At the higher economic level the average family spent $8.06 a week for food, but that meant $3.36 for each "consumption unit." While at the lower level the families laid out an average of $8.40 per family and still it divided up to only $2.25 a week for food for each "consumption unit." The people at the lower economic level spent more than 38 percent of their income for food while those above the line spent only 30 percent, having 70 percent left for other expenses.

VERIFICATION of this evidence that food costs take a bigger part of total expenditures among low income families shows in an analysis of the survey in some southern cities. Families at the lower economic level, spending a total for all expenses of about $21 a week and families above the line spending an average of nearly $32 a week, each spent about $8.50 for food. But at the lower level that $8.50 took 38 percent of their total living expenses while it took only 28 percent of the money of the families at the higher level.

AS PART of the survey, the Bureau's investigators brought in more than 3,000 records of the food purchases of representative families of city workers. These records covered one whole week at a time in each of the four seasons of the year. Trained field workers actually visited the housewives and helped them take inventories of food on hand at the beginning and the end of the record week, visiting the families every day during the periods. These records are complete down to the last pound of sugar, the last pint of milk, the last egg.

DIFFERENCES in the amount of various types of food bought in the upper and lower levels of expenditure showed up strikingly. One analysis of the data began by dividing the families in certain early reports from the study into four levels of economic well-being. In both the North and the South, the families at the top level provide more than twice as much of fresh vegetables, fruits, and fruit juices for each member of the family as the families at the lowest economic level. In both parts of the country the families who spent more than $9.60 a week for all living expense of each "consumption unit" of the family ate more than half again as much meat, poultry, eggs, and cheese as the fami-



lies spending less than $5.75 a week for all needs of each unit. Even without detailed nutritional analysis of the food bought, it was safe to conclude that "as total family funds increase, workers buy diets more nearly meeting their own nutritional needs and those of their families."

MEASURING these food purchases in detail against the best available yardsticks of nutrition to see how well the families in the different economic levels were nourished was the job of the specialists in the Bureau of Home Economics of the Department of Agriculture. The subject of course is prickled with problems. So far, nutritionists know more about the kind of nutrients the body needs, than about how much of each is needed for health. Then there's the question of deciding just what is "normal" in health and nutrition. A diet can keep a person in what might be called average health, yet hold him back from his best possibilities in health or physical development. But even though nutrition research has far to go before it reaches precise measurements of minimum or optimum requirement it has already brought out some information about what humans require of certain important food factors. These factors selected as significant and measurable yardsticks of the nutritive content and adequacy of a diet are energy value, in terms of calories; protein; calcium; phosphorus; iron; Vitamin A; Vitamin B; Vitamin C; and Vitamin G (flavin).

NUTRITION SPECIALISTS of the Bureau set up tentative allowances of these nine important food factors on the basis of a consensus of all accredited scientific findings in the field. These allowances were high enough to give a safety margin, for there are losses in some food elements during the preparation of the food, and human bodies also vary in their needs and in their ability to make complete use of food. Then nutritionists calculated the food values in the food bought by 209 families in North Atlantic cities during the winter season, according to the best knowledge of the composition of the average foods of the same type. Finally they compared these estimated food values bought by families at three levels of economic well-being with the yardstick allowances set up as adequate for human health.

ALL the families in the top category, spending as much as $500 a year for all expenses of each consumption unit, bought food containing enough of the known nutrients to equal or better the yardstick set by the nutritionists. The average food supply of those families in the middle group—spending between $300 and $500 a year for all expenses of each unit—met or bettered the probable minimum dietary requirements, except for calcium. Most families in the lowest expenditure group—spending less than $300 for taking care of each unit of the family—bought an average supply of food that would not meet the allowances of one or more important food factors.

AMOUNT of food bought showed direct relationship to the level of economic well-being. But the kind of diet bought showed an even more striking relationship. The families spending as much as $9.60 apiece for all the needs of their family units had a great deal more of eggs, milk, meats, and fruits and vegetables than those families whose units had an average of less than $5.75 apiece spent for living costs.

THE TREND in food consumption with each step up in the level of economic well-being shows even more sharply if the families are divided up into classes according to the amounts they spent for food. Not all families allot their food money according to the same sense of values. Averages do not show up the individual variations in the decisions people make as to importance of different uses for their money. When the home economists classified the families into groups according to the level of their expenditures for food for each consumption unit, they found that the highest group of food spenders bought more of all types of food than the lowest group, but there was an even sharper difference between the amounts they bought of certain foods. The highest food expenditure group bought between two and three times as much as the lowest group did of eggs, milk, meats, and fruits and vegetables other than potatoes and dried legumes. There is nothing in these figures to guarantee that every egg and every vegetable served the final purpose for which it was bought. The records show only what was bought, not how much was eaten.

THREE TIMES as many eggs were bought by families on the top food-spending level than those in the lowest group, and almost twice as much of dairy products. Eight times as many pounds of citrus fruits went into the homes of families spending the top amounts for food.

OTHER TYPES of food went up too, as the amount of money spent for food increased, but not

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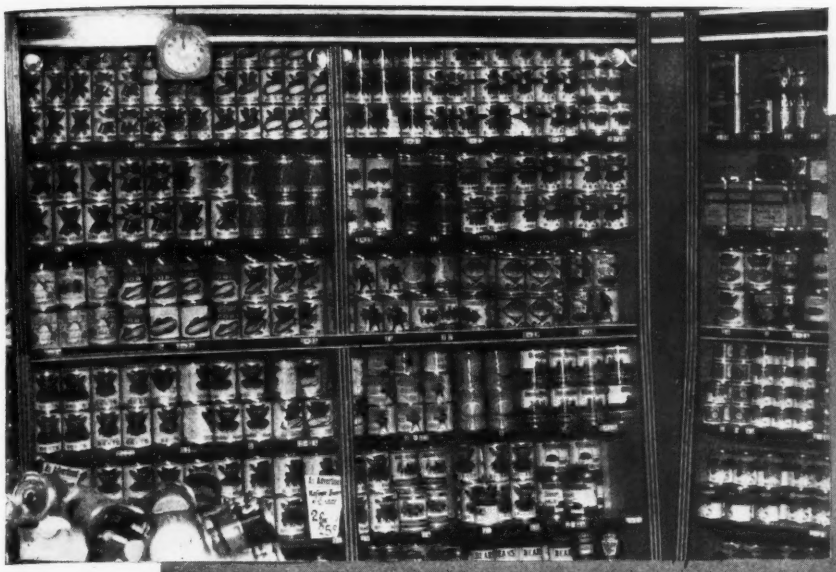

FOOD IN THIS YEAR'S CANS

A preliminary measure of this year's canned food prospects as they stack up against consumption and supplies of other years

DROUGHT conditions have sharply reduced the current pack of important vegetable canning crops, but estimates based on crop conditions on September 1 show no serious shortage in total supplies for consumption in the year ending June 30, 1937. Though current packs of sweet corn, green peas, and sauerkraut are expected to be about one-third smaller than a year ago and bring higher prices on that account, larger packs of canned tomatoes, tomato juice, lima beans, and asparagus will make up for part of the deficiency. While each consumer's share of total supplies of canned vegetables available for consumption in 1936-37 is expected to be 5 percent below the amount consumed in 1935-36, it will still be larger than per capita consumption in any other recent year, and 21 percent above average per capita consumption in the 5 years 1925-29.

CARRYOVER or storage conditions are behind the fact that there is such a slight decline in current supplies from the amount consumed in 1935-36. Even though the current pack estimated at 86.5 million cases, is still 16 million cases below the unusually large pack of a year ago, it is larger than in any other recent year. This last season ended on a plus note, since more canned food was left in storage at the end of the season than was in storage at the beginning, showing that consumers had not used as much as canners had packed that year. Consequently, a part of last year's pack is available for use this year. With a large carryover at the beginning of the present season and a small carryover expected at the end of this season, supplies available for consumption during 1936-37 will be larger than the current pack and as a result only 5 percent below last year's consumption.

DROUGHT must take the primary share of responsibility for the decline in this year's pack of canned vegetables. Demand for canned vegetables has increased during the past 3 years, so farmers planted a total acreage 3 percent larger than the harvested acreage last year, and larger than any other recent year. During May it appeared that there would be an unusually large crop. With a fairly large carryover, canned goods were selling at relatively low prices. Dry weather during June curtailed yields and changed the outlook.

On July 1 it appeared that the total pack would be 7 million cases below 1935. But the hot dry spell in August caused the most damage, cutting the estimated pack to 17 million cases below 1935, and making recovery doubtful. Rains during August put one million of these lost cases back into the estimate but most of the principal crops were damaged beyond recovery. The drought has been broken completely by September rains and no further drought damage seems on the cards.

PRICES of some canned products are likely to reflect the double influence of increasing consumer income and slightly reduced total supplies. Wholesale price rises between June and September suggest a rising trend, sharpest in the case of sauerkraut. During this period wholesale prices of No. 2 size cans of corn, peas, and spinach went up about 2 cents a can, while tomatoes and string beans went up 1 cent.

OCTOBER will give a better picture of the price outlook, when canners can know the full size of the current pack and set their wholesale prices. Once set for the season, these prices usually stay fairly well in line until May, when they are readjusted on the basis of estimates of the new pack.

RETAIL PRICES averaged for the country on canned corn, peas, and green beans advanced from July 14 to September 15, but it is probable that changes in wholesale prices will not be reflected in higher retail prices until later in the year when stocks bought at low prices will have to be replenished. On September 15, retail costs of canned vegetables and fruits, as reported by the Bureau of Labor Statistics, were only 0.4 of 1 percent above September 10, 1935.

DROUGHT did not hit all canned vegetables with equal force. There are 10 canning vegetable crops, and per capita supplies of only 4 of these will be larger than a year ago. These crops are tomatoes, tomato juice, lima beans, and asparagus. The major decline from a year ago appears to be in canned peas, corn, and sauerkraut. Moderate reductions from last year are expected in spinach and beets, with a minor decline in string beans. Compared with the 1934-35 period, the period following the last drought, per capita supplies of all products except beets and cabbage will be larger compared with average per capita consumption during 1925-29. Only cabbage, peas, corn, and spinach will be smaller.

TOMATOES are the largest single item in the total vegetable pack and supplies available per person are expected to be 4 percent larger than last year and 18 percent above average. The acreage planted to tomatoes was slightly smaller than during 1935, but because of better yields, which were still below average, a crop considerably above average and 2 percent above 1935 was forecast. Tomato canning reaches its peak during September, and the canning season continues until frosts damage tomatoes and prevent further harvest. Despite the larger pack, wholesale prices of No. 2 canned tomatoes went up 10 cents a dozen during August and in early September were selling at about the same amount above last year's level. Average U. S. retail prices of No. 2 size canned tomatoes went up 0.2 cent a can from August 18 to September 15, bringing retail prices up to their level of September 10, 1935.

GREEN PEAS are second in importance to canned tomatoes and this year's canning supplies have been reduced 93,000 tons below last year's 268,000 ton crop. As a result, per capita supplies of canned peas are expected to be 35 percent below per capita supplies a year ago, and 12 percent below average per capita consumption. At 90 cents a dozen No. 2 cans, the wholesale price of canned peas in early September was 20 cents above prices a year ago and about the same amount above June prices.

SWEET CORN is the third largest canning crop and because of sharply reduced supplies this year, the wholesale price of No. 2 size cans advanced about 2½ cents from the end of June to the first week in September. Wholesale prices were about the same amount above a year ago. The acreage planted to corn for canning this year was 6 percent above the large 1935 acreage which produced a 21.5 million case pack. Because of the lowest yield per acre on record, this year's larger acreage is expected to produce only a 14.5 million case pack. This means that per capita supplies will be 33 percent below 1935, and 22 percent below average. Because of last year's large pack, the average U. S. retail price of No. 2 size canned corn declined from 13.5 cents in July 1935 to a low of 11.2 cents per can on June 2, 1936. Between June 2 and September 15, the U. S. average retail price advanced over one and one-half cents a can.

ASPARAGUS and spinach packs for the current year have been completed and while per

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KEEPING FRESH EGGS FRESH

Many farmers give their eggs a fresh start by gathering them several times a day and cooling them immediately.

Science steps in with new ways to smooth out the ups and downs in the calendar of fresh egg supply

EGGS of higher quality on breakfast tables from August to December may be one important result of a newly discovered method for oiling eggs before putting them in cold storage. If preliminary tests are any indication, "vacuum-carbon dioxide method" may soon be words to conjure with.

EXPERTS at the Bureau of Chemistry and Soils for several years have been tussling with a very special egg problem. They have been looking for ways to keep eggs from deteriorating while in storage. A new trick which these experts have developed may furnish one solution. But before we launch into details, consider the egg situation.

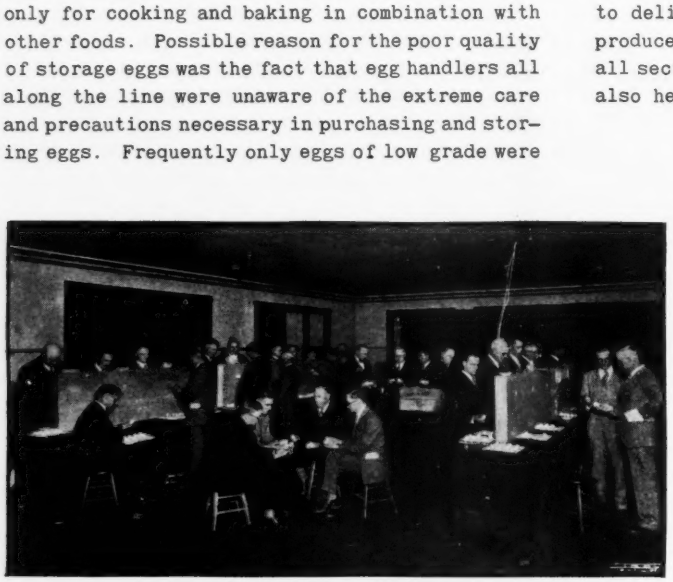
CHICKENS lay their eggs pretty much according to their feeding habits and the conditions of their environment. Some months of the year they are lavish with their gifts, other months they are niggardly. It's the same way almost every year, and humans, with all their cleverness and science, do not make most chickens change their habits--very much.

COME MARCH, April, May, and June, and poultry work overtime, so much overtime that they lay more than half the annual egg crop in these 4 months alone. And people refuse to eat all those eggs in just those months. They eat only as many as they are accustomed to eating, regardless of chickens' habits. But they want their eggs from August to December, too, when the hens aren't laying so very many.

SOLUTION to the problem could come only with a method of saving some of the eggs from the season of plenty for the time of scarcity. In some countries it is the custom to store eggs by transforming them into new substances, just as some dairy farmers make cheese out of milk. In the Philippine Islands, for example, eggs become "balut" when boiled after incubating almost to the point of hatching. In China eggs keep for years when transformed by use of brine mixture into "pidan." In India there is still another product.

AMERICANS, however, generally want to eat eggs in December in their natural form and as fresh as eggs in May. Hence we try to preserve our eggs so that little or no change at all takes place during storage. We endeavor to maintain all the fine qualities of a new-laid fresh egg, even over a period of several months.

MODERN developments in cold storage technique have done much to bring better eggs to consumers during the slim months. In past years housewives looked askance at storage eggs. Bitter experience showed that such eggs ran all over the pan when you tried to fry them sunny-side up. And oftentimes the whites failed to hold together when you tried to poach them. Small wonder, then, that consumers were willing to use storage eggs only for cooking and baking in combination with other foods. Possible reason for the poor quality of storage eggs was the fact that egg handlers all along the line were unaware of the extreme care and precautions necessary in purchasing and storing eggs. Frequently only eggs of low grade were put into storage. Nobody could expect these to come out of storage as high-grade eggs.



Students learning U. S. standards of quality by means of candling tests in the poultry marketing school of Cornell University.

TODAY the situation is rather different. Storage is on a much more scientific basis, and most of the people who handle eggs in and out of storage have learned the pointers essential to maintaining high quality. As a result, the batting average of storage eggs is much higher than it used to be.

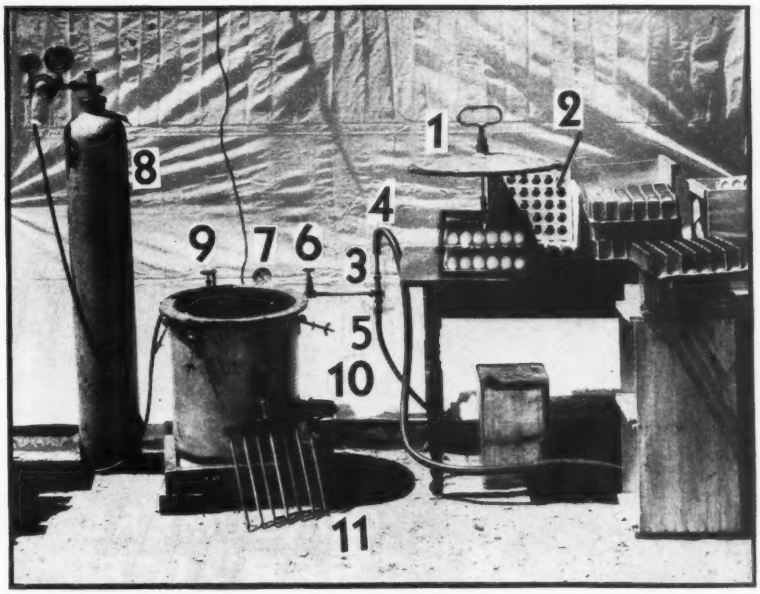
COLD STORAGE, modern type, dates from about 1890. Before then a simple mixture of crushed ice and salt was used to cool storage warehouses. Development of mechanical refrigeration has of course changed that picture. From 1905 to the present time the total storage capacity of the country has grown by hundreds of millions of cubic feet. Figures from the Bureau of Agricultural Economics show 100,000,000 cubic feet of storage space in 1904, and 700,000,000 cubic feet in 1935.

REASONS for this rapid growth are not hard to find. More and more people were moving to big cities. But even in a metropolis people continue to want eggs and other farm products regularly, in and out of their natural seasons of production. Refrigerator cars made it possible to deliver highly perishable products from the producer to large central storage warehouses in all sections of the country. Refrigerated trucks also helped.

MORE SPACE in public storage warehouses is used for eggs than for any other commodity except apples. In September 1915, there were over 170,000,000 dozens of eggs in cold storage. In 1927 there were almost twice as many. During the past few years the figure has come down somewhat, due partly to general business conditions, partly to the increasing use of frozen eggs.

WAREHOUSES located near large consuming centers store a great many eggs each year. These plants, able to make food supplies available on short notice, are not hindered by severe storms or railway congestion. Their customers surround them on all sides. Other warehouses, located near producing centers, have the advantage of often receiving their goods only a few hours after they leave the farm. This frequently means higher quality when the storage stock comes out of the warehouse.

KEEPING a large room cool is only a small part of modern egg storage. Air circulation must be good, and humidity must be controlled. Rooms containing eggs should contain no other products. There are plenty of reasons for all this. Egg shells are not made of flint. They are porous, and absorb odors and flavors easily. If stored for any length of time near apples, for example, eggs are liable to acquire an apple flavor. Some warehouses even use an ozone machine to keep the air fresh and sweet. Control of humidity does two things. It keeps moisture from evaporating out of the egg too fast, and it retards the development of molds.



In this picture of the portable vacuum-carbon dioxide oiling apparatus designed and built in the Department of Agriculture, No. 1 shows the oil-tank lid fitted with a movable rack which carries the aluminum egg trays (No. 2). No. 3 shows the water aspirator into which water flows through hose No. 4 and is carried away through waste hose No. 5. The vacuum is drawn by suction of the water flow and is controlled by shut-off valve No. 6 and measured on vacuum gage No. 7. No. 8 shows the source of carbon dioxide gas, the flow of which is controlled by valve No. 9. No. 10 shows the electric heating unit which warms the oil to the desired temperature of 135° F. An "egg fork" which handles one three-dozen layer of eggs at a time is shown at No. 11.

CARBON DIOXIDE is an important factor in egg storage. Every egg, as soon as it is laid, begins to give off this colorless, odorless, and tasteless gas. A chemical change occurs when this happens. To hold this change in check, and to retard the loss of the gas, the air in some egg storage rooms is regulated so as to contain a definite amount of carbon dioxide. Scientists further developed a method for coating eggs with a pure tasteless mineral oil before putting them in storage. This oil treatment to some extent also keeps water from evaporating out through the porous egg shell, and foreign odors and bacteria from making their way in.

NOW here is where the "vacuum-carbon dioxide method" mentioned in the first paragraph comes in. According to this method, prospective storage eggs are placed in a chamber the lower half of which contains a quantity of oil. Air is drawn out of the chamber until there is a vacuum. The eggs are then immersed in the oil and raised above the surface. Then the vacuum is released, not with air again, but with carbon dioxide gas. Studies and tests made on eggs thus treated have shown conclusively that this method is efficient in maintaining the original quality of eggs during storage. Tasting and flavor tests conducted by the Bureaus of Chemistry and Soils, Agricultural Economics, Home Economics, and Animal Industry showed further that oiling does not affect the flavor of eggs during storage.

NOWADAYS many egg farmers gather their eggs three or four times a day and cool them at once. They also arrange for all handling and transportation to be done at low temperatures. Merchants keep eggs in their refrigerators. Consumers should do the same. For home use consumers can further protect themselves by buying at one time only as many eggs as they will use in 3 or 4 days.

GRADING of eggs often takes place many times before the eggs reach consumers. Sometimes the farmer candles his eggs before selling them as fresh or sending them to a storage warehouse. Eggs are often graded, and candled too, before they enter storage rooms. Similar grading takes place when eggs come out of storage. Tests show that oil treatment raises the percentage of eggs maintaining their original grade.

CARTONS of eggs sold in an increasing number of groceries in large cities often bear a dated seal indicating a Government grade. Consumers should be wary, however, of the merchant who keeps his eggs in crates on the floor, or on counters. Deterioration takes place in those eggs much faster than in refrigerator-stored eggs. Highest grade eggs, if kept in a sunny show-window for only a few days, soon drop to lowest grade.

GRANTED that egg quality can be maintained during a several months' sojourn in cold

[Concluded on page 23]

A convertible laboratory in the New York State College of Home Economics becomes a theater to show results.

Second chapter of the record of work valuable to consumers done in 1935 by State Experiment Stations in coöperation with the Department of Agriculture and with State Agricultural Colleges

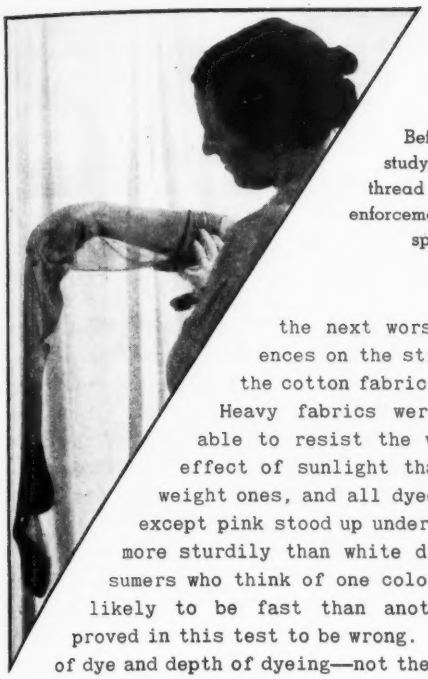
SILK STOCKINGS found a spot on the study list of researchers at the Montana State Experiment Station in 1935. They made a survey of Montana women, their stocking problems and habits. They put eight popular brands of hose through laboratory and actual wearing tests.

RESULTS of the study prompted these suggestions to silk stocking consumers everywhere: Before buying, check on the weight or the thread number; look for evidence of twist in the silk yarn; examine reenforcement of the high splice; see whether the hose are firsts or irregulars; buy hose of correct size and suitable length. But the careful consumer does not stop with prebuying precautions. If you would wear your stockings long, wear correctly fitting shoes as well as stockings; wash your stockings often; and handle them carefully to prevent snags and runs.

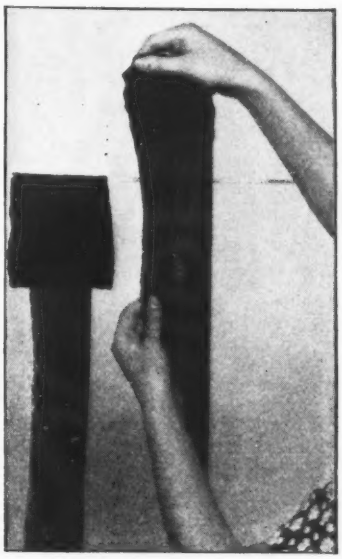
TEXTILES came in for extensive study in several States. The Minnesota Experiment Station tried to find out if consumers could safely depend on the price of a piece of serge, gabardine, or dress flannel as an index of its quality. The results, though they included much valuable information for textile experts, showed no point where quality and price corresponded on all three types of material. "It must be concluded, therefore", said the report, "that price in the case of these three kinds of fabrics is not an adequate guide in selection on any basis except cost to the consumer."

SAME RESULT followed tests of white cotton materials for the same purpose by Ohio State University. The testers bought Oxford cloth and cross-bar dimity of fancy basket weave, and pique of rib weave, at both the high and the low ends of the price scale for these fabrics. They could find no uniform differences between the quality of the cheap and expensive materials of the same type.

SUNLIGHT on cotton cloth over a long time is the greatest natural weakener of the fiber, according to the results of a study which has been going on for some time at the Texas Experiment Station. Temperature and relative humidity are



Before buying, study weight or thread count; reenforcement of high splice.



After buying, wash often and handle carefully to prevent snags and runs.

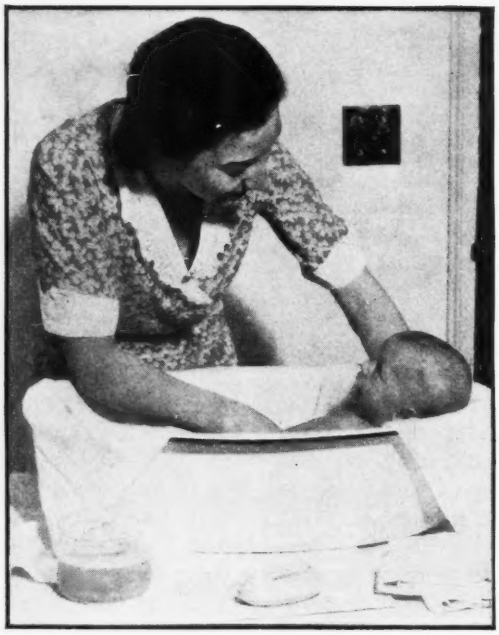
the next worst influences on the strength of the cotton fabrics tested. Heavy fabrics were better able to resist the weakening effect of sunlight than lightweight ones, and all dyed fabrics except pink stood up under sunlight more sturdily than white did. Consumers who think of one color as more likely to be fast than another were proved in this test to be wrong. The kind of dye and depth of dyeing—not the original color—were the significant factors in change of tint. Tests proved again that what a label says and also what it does not say can be important to consumers. Fabrics that were guaranteed to be sunfast were not as likely to fade as fabrics not guaranteed, but those guaranteed to be tubfast were not necessarily lightfast. Moral to consumers buying wash fabrics is to look for labels that give the answer to both these questions.

Labels may tell whether fabric is fast to both laundering and sunshine.

MEN'S SHIRTS of white broadcloth as a staple family requirement took their place on the investigation agenda at the Minnesota Station. Question was whether medium priced shirts measure up to known standards such as the specifications recommended by the United States Bureau of Standards. The researchers bought eleven pairs of duplicate shirts, nine priced at about $1.50 and two at about $2.00. Only three of the 22 shirts met the proposed commercial standards. The test showed no consistent differences between the two price ranges in fabric quality or construction except for more uniform stitching on the higher priced shirts. The sleeves were nearly all shorter than their markings indicated, and the collar bands were all longer than they were marked—before washing. After laundering, some of them were shorter than the marked size. Though ten of the eleven pairs of shirts had been advertised with statements of their treatment to prevent shrinkage, after 25 washings only one shirt of the 22 could boast a shrinkage as low as the "less than 2 percent" standard set by the proposed commercial standards.

CHOICE between home production and commercial purchases of consumer goods and services was recognized by several State

experiment stations as a current problem of homemakers. Both Vermont and Nebraska investigated the relative cost of home-made and bakery bread, and their conclusions appeared in the last issue of the GUIDE. The Washington Station took up the question of home laundering vs. commercial laundry. Conclusions were that the more primitive the method of home laundering the lower the cost in cash, but even at the top of three levels of equipment expense, home laundering costs less money for the average family than even the most commonly used family laundry service. As the financial toll goes down, though, the toll taken of the home launderer's time and energy goes up, so the final decision as to real economy must be made by each family according to its individual scale of values and needs.



Homemaking students at New York State College of Home Economics get actual experience in responsibility for care of babies.

HOME LAUNDERING as a definite job of household engineering is being studied at the Virginia Station. The results are not all in, but some useful conclusions have already come out of the study: (1) Soaps that seem bargains may actually be expensive in operation. The tests showed that the "cheaper, bulkier soaps give no saving in cost over the more concentrated and apparently more expensive soaps." (2) Using soft water cuts the soap requirement of hard water down by half, enough to pay the interest on a mechanical water softener. (3) Quality and durability may differ with the various power washing machines, but the ability to wash doesn't vary much. (4) Overloading the washing machine is a major reducer of efficiency. (5) Ideal water temperature for washing clothes well is 160 degrees, but from a practical point of view, counting in expense and difficulty of keeping a supply of water so hot, the average launderer is about as well off with a temperature of 140 degrees.

FOOD HABITS of young children received continued attention from the Ohio Station. After 2 years of study of nine preschool children the Ohio researchers concluded that not only is proper selection of food important but that other factors play their part in a child's nutrition. Excitement and emotional strain cut down the amount of food the children in this study could make use of to build their bodies.

ANOTHER TEST showing other factors along with choice of foods as influences on child health was carried on by the Utah Station in 1935. Children who had about the same health and nutritional history were divided up into two groups as "less healthy and more healthy." The small differences in their background which showed up consistently in the records of the healthy group were slightly better conditions at birth, better conditions of breast feeding, more adequate supply of minerals and vitamins in the food, less sickness in earlier childhood and in the home in general, less crowded and better sleeping conditions, and better emotional atmosphere.

PROTECTIVE foods on the diets of a group of school children were recorded and studied by the Rhode Island Experiment Station as to their adequacy, their amount, their cost. The research showed that while in general the quality of the food bought went up along with increases in money spent, the records of about one-sixth of the mothers showed it was possible with intelligent spending to buy an adequate supply of protective foods for a child during 1933-34 for from 50 cents to $1.00 a week.

For details of each State's studies write to that State Experiment Station. Full story of work on both farm and home problems in 1935 is told in "Report on the Agricultural Experiment Stations", on sale for 15 cents by Superintendent of Documents, Washington, D.C.

SAFE FOOD TO CONSUMERS

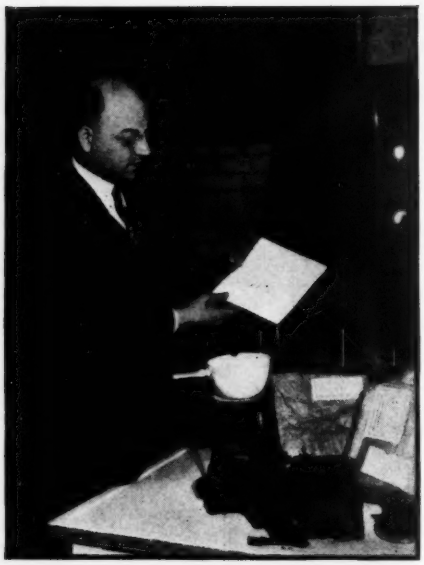
Officers of the Food and Drug Administration help protect the interest of both farmers and consumers when they do their job of guarding the purity of food on the way to the national dining table

(Extreme top) Federal inspectors examine foods shipped in from foreign ports. (Above) Food and Drug inspectors take responsibility for the wholesomeness of the butter shipped across State lines.

GOVERNMENT and consumer work hand in hand to keep the food on dining room tables pure. A recent issue of CONSUMERS' GUIDE (June 15, 1936) explained the menace of carelessness, Public Enemy No. 1 in the kitchen, and listed rules for guarding against food poisoning in the home. Such precautions are every housewife's immediate care and responsibility. Out in the field, out where food shipments move from producer to warehouse to city markets, across State lines, the Federal Government does its share in protecting the consumer against poison menaces.

AMONG the 695 people employed by the Federal Food and Drug Administration are specialists highly trained in the problems of food. There are chemists, bacteriologists, physicians, veterinarians, entomologists, plant pathologists, microscopists, pharmacologists, and inspectors. These are the men and women who carry out for us the provisions of the Food and Drugs Act. These are the people who take adulterated, decomposed, or potentially dangerous food products off the market before any harm comes to consumers.

ENFORCEMENT policy of Food and Drug officials takes its cue from these words: Maximum protection for consumers, minimum disturbance to legitimate commerce consistent with such protection. Plan of organization has been so arranged as to insure the carrying out of this policy, insofar as limited funds and personnel permit.



Cause of most food poisoning caught by Federal chemists is carelessness. Accidental contamination with arsenic took these fruit cakes out of circulation.

Inspectors and specialists man branch stations in 16 leading American commercial cities, among them Los Angeles, Denver, Minneapolis, St. Louis, Cincinnati, Atlanta, and Boston. Various station territories are in turn grouped into three districts, with headquarters at San Francisco, Chicago, and New York. In Washington are the executive offices and technical control laboratories whose function it is to recommend methods for attacking regulatory problems, conduct necessary investigations, and solve difficult technological questions.

ENORMOUS quantities of foods of all kinds pass in interstate commerce every day. Further large quantities enter this country from foreign lands. It is the job of the Food and Drug Administration to supervise this food traffic and to keep unfit food from crossing the consumer's threshold.

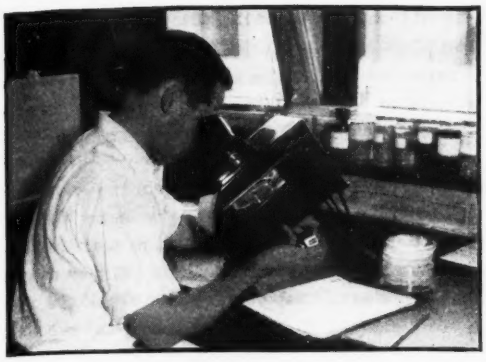
MOST American food manufacturers, doing an honest and legitimate business, never have tussles with Food and Drug officials. But a very small proportion of food manufacturers and handlers deliberately, negligently, or unknowingly violate the law in some respect. Trained inspectors make thoroughgoing factory investigations to determine which manufacturers are complying with the law. On rare occasions, when an inspector is not allowed to enter an establishment, Food and Drug officials can often get the necessary information by buying samples of the product on the market and then making chemical analyses in their laboratories. These procedures indicate just which food commodities are adulterated, and which types of violations may be anticipated.

THIS information, coupled with reports from consumers and others, forms the basis for each year's work. All field agents, advised of details, work in complete harmony. The plan of operation is kept flexible enough to allow all the energies of the personnel to be concentrated on one activity or section in case of emergency, such as an outbreak of food poisoning, or the threat of one, like the danger of flooded food supplies last spring in the Northeastern States.

VIOLATIONS of the Food and Drugs Act are punishable by criminal prosecution and seizure of the adulterated or otherwise unfit products. Food and Drug Administration officials like to compare seizure with the stopping of a murderer's bullet in flight. Seizure keeps adulterated or misbranded food from reaching and harming consumers. Information on the results of current seizure actions and prosecutions is published in "Notices of Judgment", issued at frequent intervals. Consumers may have their names added to the mailing list for this pamphlet by writing to the Food and Drug Administration, United States Department of Agriculture, Washington, D. C.

TO PREVENT violations, the Food and Drug Administration carries on a definite educational program. It issues notices to the trade, acquainting manufacturers with requirements of the law, and announcing enforcement policies for newly developed products or production techniques. Such notices often include constructive suggestions as to the production and marketing of any fully legal product. This educational work assures consumers of a far greater degree of protection than they would otherwise have.

FARMERS destroy insect pests on some growing fruits by using poisonous metallic sprays. So far, science has found no nonpoisonous substitute for some of these poison sprays. To protect consumers, this poison residue must be removed before the ultimate consumer buys and eats the product. Most of the time the residue is removed down to the allowance set by the Food and Drug Administration regulations. The Food and Drug Administration uses up a third of its



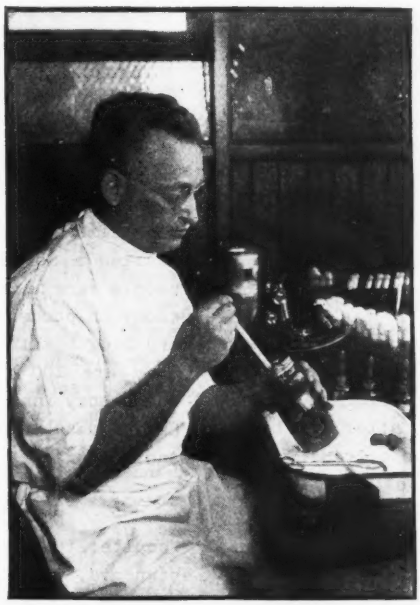
(Above) Counting bacteria is one method of gaging the purity of milk and other foods.

personnel and limited funds each year to make sure. During the growing season, inspectors go to fruit-growing sections, examine samples of fruit, and explain to growers and State officials the dangers of lead and arsenic residues. They also give information on new methods of removing spray residue from fruit. Where growers are unacquainted with the Federal law, the inspectors make the fine points clear and also mention the penalties for shipping fruits with illegal amounts of spray residue into interstate commerce.

PROTECTING consumers against harmful or poisonous coloring materials used in foodstuffs is another function of the Food and Drug Administration. Dyes in foods should obviously not contain toxic materials. Food and Drug officials take two preventive measures. They issue a list of coal-tar colors known to be harmless when properly prepared. They also examine batches of coal-tar colors and issue certificates for those found harmless. Thus, by proper use of certified coal-tar dyes, manufacturers may avoid all risk of distibuting foods not safe because of coloring materials.

YEARS AGO Food and Drug officials won a health war on doctored-up dried fruits. Old dried fruit ordinarily becomes wormy, moldy, rancid, or rotten. Unscrupulous individuals would buy up such stocks of spoiled dried prunes, dried apples, dried apricots, or dried peaches, and then give them a beauty treatment. This consisted of soaking, brushing, washing, polishing, and coating, until the moldy and rotten fruits seemed to be fresh and luscious. Then the stuff was sold for people to eat.

PROMPT action by an alert Food and Drug official resulted in seizures of large quantities of the unfit food, and Federal prosecution of the dried-fruit doctors. Traffic in this sort of dangerous material, which might have contained the germs of food poisoning, was effectively stopped.



SOME few canners of food need watching. When a Federal food inspector visited a small peach-canning establishment some

(Left) Bacteriologists in the Food and Drug Administration are always on the watch for the Botulinus germ. (Below) Federal Food Inspector collects a sample of olive oil to be tested by the laboratories.

time ago, he found a large stock of low-grade peaches undergoing decomposition. The canner picked out the best of the bad lot for shipping in baskets, and prepared to can the remaining ones—rotten and wormy. Pits removed, the peaches were packed in cans without sorting, trimming, or washing. The inspector identified himself to the manager of the plant, pointed out that the peaches were unfit for use as food, and recommended that they should not be sold.

BUT the canner shipped out 179 cases, or more than 4,000 cans, anyway. The inspector, having learned of the shipment one hour after the goods went to the railroad, proceeded to the destination point and collected samples. Examination showed that the product was largely filthy, rotten, and wormy. Where filth, rot, and worms occur, there may also lurk germs which would cause severe food poisoning. The facts reported to a United States court, the judge ordered the property seized. Then followed a trial before a court and jury, and a verdict for the Government. The goods were forfeited and condemned, the dangerous peaches destroyed.

ALMOST a billion carcasses of dressed poultry are consumed in the United States each year. Table-trade poultry is generally selected stock of superior quality. But after the best fowls are selected for the table trade, each dressing plant has on hand a lot of culls—left-over birds, diseased or otherwise inferior.

ONE chicken canner some years ago bought up a large number of culls—diseased, bruised, emaciated birds. These he planned to turn into canned "Chicken a la King." But the Food and Drug inspectors interfered, the goods were seized, and large quantities destroyed.

POULTRY packers, shippers, and city distributors then came together for a conference at which they condemned the receipt and shipment of inedible poultry. This attitude of the poultry trade itself, plus the knowledge that seizure and prosecution would follow violations, has largely cured the situation. Enforcement of the Federal Food and Drugs Act thus solved another problem and helped keep the lanes of food commerce free from poison dangers to consumers.

REGULAR inspection service by the Bureau of Agricultural Economics now comes to practically all chicken-canning plants. Most canned chicken products these days contain only material from inspected birds free of disease, and definite statements on the label tell you about the Government inspection.

PREVENTION of food poisoning saves the economic lives of farmers at the same time it saves the physical lives of consumers. When news leaks out about an outbreak of illness caused by a certain food, that food gets a black eye from which it takes a long, long time to recover. People stop eating that food, and farmers producing it are hurt accordingly.

OLIVES about 15 years ago caused more than a mere flurry in most American kitchens. A number of cases of botulism, deadliest of all food poison diseases, had broken out, and had been traced to bottled California olives. Food and Drug officials stepped in, and showed olive packers how to prepare their product so that it was quite safe to eat. The olive industry also started a series of studies. For a long time people were naturally scared of olives, and even today an occasional consumer writes to the Food and Drug Administration to ask if they are safe. They are 100 percent safe. California has a compulsory inspection service for olives and the California Health Department approves, certifies, and checks every bottle of olives packed.

BEFORE some foods can be said to be "adulterated", they must be compared to a suitable standard. Food and Drug scientists are constantly investigating natural products and formulating such standards.

BORDERLINE between legal and illegal spice, for example, a few years ago was very hazy. It was almost impossible to determine just when a spice could be legally called "adulterated." To settle the question, chemists and microscopists went to work on a study of all commonly used spices. On the basis of this study, Food and Drug officials set up and published fair standards for spices. Similar questions on many other types of food products have been settled in much the same way.

COPIES of the official "Definitions and Standards for Food Products" may be obtained by requesting booklet "S. R. A., F. D. No. 2" from the Food and Drug Administration, U. S. Department of Agriculture, Washington, D. C.

SUPPLYING FOOD FOR ADEQUATE CONSUMPTION

[Concluded from page 6]

so noticeably. Families in the top level of food expenditure—those spending around $3.90 a week on food for each consumption unit—bought only one-quarter pound more sugar and sweets a week for each consumption unit than the families in the lowest economic level who spent around $1.60 a week for food for each unit. Little difference may be seen in the purchases of inexpensive foods such as flours and cereals, lard and other cooking fats.

MOST IMPORTANT conclusion brought out by nutritional analysis of this first sample slice of information about the food-spending habits of families at the lower income levels was that families having more to spend for each member provide themselves with more of their most needed foods than families having less to spend.

WITH THIS conclusion goes the statement that an expert trained in selection of foods on the basis of today's knowledge of nutrition could take the same money spent for food by those at the lower income levels and buy a diet more nearly approaching nutritional adequacy. The nutritional expert would concentrate on foods that give a high return in various nutritive factors for the money spent. Since the diets tended to go short first in calcium, iron, and Vitamins B and G, the experts would underline milk in its cheaper forms, cheese, and inexpensive types of leafy green and yellow vegetables on the marketing list for families with little money for food. They would make milk, potatoes, dried legumes, and whole grain breads and cereals mainstays of the diet because they "yield excellent returns for expenditures in the nutrients needed to supplement present low-cost diets in an effective way." (Graphic pictures of the relative returns in food value for money spent were published in the CONSUMERS' GUIDE of August 24. More detailed day-to-day help in planning menus comes in a new bulletin published by the Bureau of Home Economics—"Diets to Fit the Family Income.")

BETTER DIETS, based on the modern information about nutrition, will mean, according to one scientist, "a larger stature, greater vigor, increased longevity, and a higher level of cultural attainment." Against the background of that realization it is hard to overdraw the importance of studies which bring out the facts about how many of us are getting adequate nourishment, how much income is required to give it to us, and how much food the farmers would be called upon to provide if all the population could meet the standards of adequate nutrition.

FOOD IN THIS YEAR'S CANS

[Concluded from page 8]

capita supplies of asparagus are 10 percent above 1935, spinach supplies are 15 percent below a year ago. These crops are produced principally in California where vegetables have not suffered from the ravages of the drought. Below normal production in other parts of the United States pulled the total spinach pack below last year's and below normal.

STRING BEAN supplies, figured on a per capita basis, are expected to be 10 percent below last year, but the outlook is for a 30 percent increase in per capita supplies of canned lima beans. However, supplies of both of these canned crops are more than double the average per capita consumption from 1925 to 1929 and larger than in any other recent year. Increase in lima bean supplies is due primarily to an 18 percent larger acreage, while the reduction in string beans comes from low yields offsetting larger acreage.

SAUERKRAUT appears to have suffered the most from the drought. Per capita supplies of canned sauerkraut this year are expected to be 32 percent below 1935, 5 percent below 1934, and 28 percent below average. Reduction in this year's pack has occurred because production of cabbage for kraut is only two-thirds of its 1935 level.

RECORD canned tomato juice supplies are in prospect for 1936-37. Expanding consumer demand has caused sharp yearly increases since 1929 in the tomato juice pack. Back in 1929 only 165 thousand cases of tomato juice were packed. In the year ending June 30, 1936 the pack jumped to over 8 million cases. Prospective per capita supplies for this year are expected to be about 5 percent above the 1935-36 pack. Canned tomato juice still utilizes only a small proportion of total commercial tomato production for over 50 percent of production is used for canned tomatoes while the other half is divided among tomato juice, tomato soup, catsup, and other tomato products.

Your Food Costs

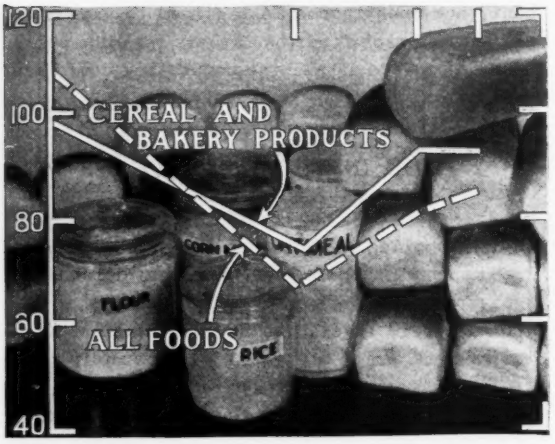
HIGHER PRICES for all food groups except fresh fruits and vegetables caused the index of retail food costs to advance 0.4 percent from August 18 to September 15. This was the first increase registered by the index since June 30, and it canceled the decline which occurred during the previous month and a half. The cost of all food groups except fresh fruits and vegetables has been going up since June 30, but up to the present period lower fruit and vegetable costs offset the other price increases. Lower potato prices were an important factor in canceling these other price increases, for, if potato prices had not changed, the index would have advanced 1.3 percent from August 18 to September 15.

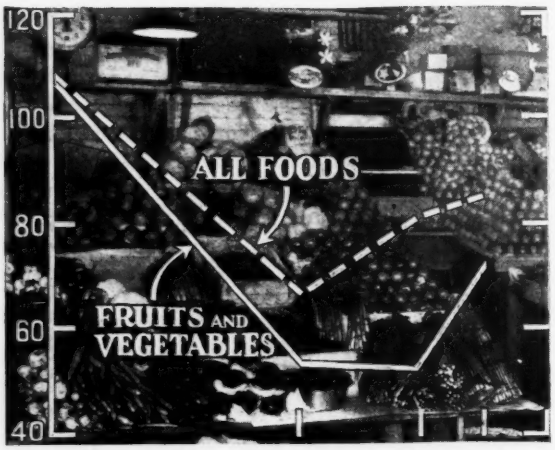
COST INCREASES in all food groups, with the exception of meats, were smaller than the increases registered the previous month. Eggs showed the sharpest gain during the 4-week period, and moderate advances showed in meats, fats and oils, and dairy products. Cereals and bakery products were slightly higher as all eight items included in this group—especially corn meal and flour—advanced in price. While egg prices went up 5 percent, the change was smaller than a year ago. Egg prices on September 15 of this year were lower than those of a year ago.

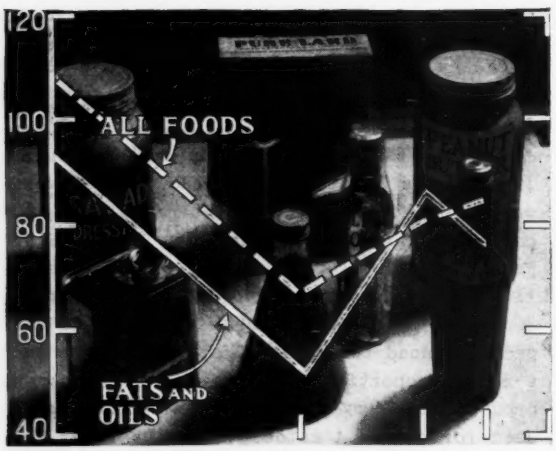
MEATS in general advanced 2 percent to the highest level reached this year, primarily because of sharp increases in fresh pork prices, but meats on September 15 were still 5 percent below costs a year ago. Higher fresh milk and cheese prices caused the 1.4 percent increase in the dairy group, counter-balancing the first drop since May in butter prices. While fresh fruits and vegetable costs dropped 5 percent, costs of canned and dried fruit and vegetable items were higher.

INDEX of retail food costs as reported by the Bureau of Labor Statistics on September 15 stood at 84.3 percent of the 1923-25 average, the highest for this season since 1930, but still 22 percent under food costs of September 15, 1929. Costs were 5 percent above a year ago, but this was due only to a 40 percent increase in fresh fruits and vegetable costs which had run at a fairly consistently low level for several years, and to a 15 percent increase in dairy products. Costs of all other food groups were lower.

A PERSPECTIVE OF FOOD COST CHANGES
1923-1925 = 100







SEPT. 15 1929 SEPT. 15 1932 SEPT. 10 1935 SEPT. 15 1936

and Supplies

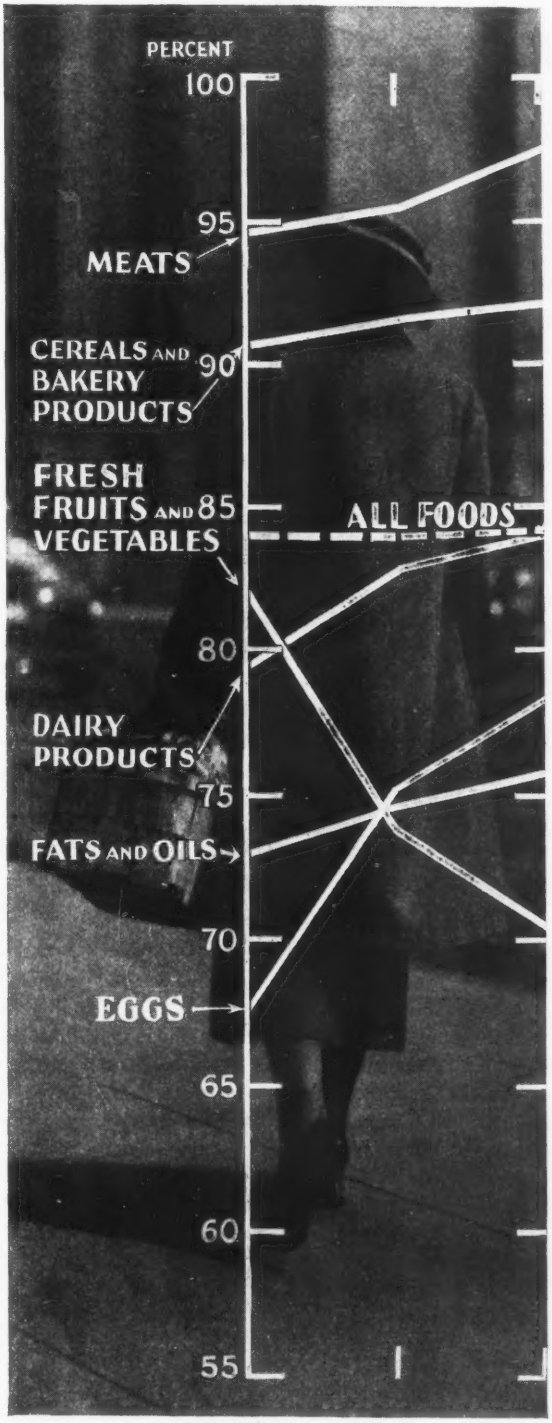
INCREASE in food costs during the month was in part seasonal. Eggs, dairy products, and pork usually go up at this time of the year. Fresh fruit and vegetable prices and potatoes usually go down and the change in the cost of all foods depends upon the rate of change in each of these items. Drought conditions have accelerated price increases in eggs and dairy products and retarded price declines in some fruits and vegetables. Increased consumer incomes also have been a major price boosting factor.

FARM PRICES in general did not change from mid-August to mid-September, although for most of the individual food items reported, farmers received lower prices in September than in August. Sharpest increase in farm prices occurred in truck crops; dairy products and eggs showed less than seasonal price advances. Fruit prices declined seasonally, and meats as a group remained unchanged since higher cattle prices offset lower hog and lamb prices. Compared with a year ago, farm prices of all food items except chickens, eggs, and meats were higher.

SPREADS between farm and retail prices remained close to the level in August, which is lower than in 1931 but above any subsequent year During September farmers received 48 cents out of every dollar spent by consumers for 10 important food products, about the same amount that they received a month earlier and in September 1935. Hens appeared to be the only item in the group on which the spread was higher than in any earlier years. The actual spread between farm and retail hen prices was the largest on record for September, and the farmer's share of the consumer's dollar spent for hens was the smallest on record. The spread between farm and retail price of pork widened slightly from August to September and was substantially larger than during the past 2 years, and at about the average levels of the 1925-29 period.

DROUGHT liquidation of poultry continued in September and receipts at major markets during the first 3 weeks were 25 percent above a year ago. August receipts were 57 percent above 1935 with most of the increase in young chickens. Increased marketings were due primarily to a 25 percent increase in commercial hatchings coupled

A CLOSE UP OF FOOD COST CHANGES
1923-1925 = 100



with drought conditions. This spring farmers acquired large numbers of young chicks to increase their laying flocks. When drought sharply curtailed feed supplies, farmers changed their plans, and sent these young chickens and their poorer layers to market. This increase in marketings will result in larger current poultry supplies, but it will probably also give curtailed egg supplies next year, and smaller marketings of fresh-killed poultry during the first half of 1937.

POULTRY storage stocks on September 1 reached a new high level of 65 million pounds compared with 35 million pounds a year ago, and average stocks of 39 million pounds. This huge increase in storage stocks forced wholesale price declines of from 2 to 3 cents a pound in late September and early October. Roasters weighing 4½ pounds and up were the only exception, being 2 to 3 cents per pound higher due to the small amounts marketed this year.

RETAIL poultry prices declined 0.5 cent to 32.8 cents per pound during the 4-week period, but prices are still about 5 percent above prices a year ago. Farm prices of poultry dropped from 15.1 to 14.9 cents per pound in the same period. Because of sharp declines in farm and wholesale prices since these reports were issued in mid-September, further substantial declines in retail prices are expected. Poultry prices usually reach their low point in December when heaviest marketings occur. Due to the early marketings this year the low point may be reached in November.

BUTTER registered its first retail price decline since early May when prices dropped 0.1 cent to 42.4 cents per pound from August 18 to September 15. Butter prices usually increase seasonally in the fall and this decline appears to be a temporary recession from high levels reached much earlier this year. Farm prices of butterfat usually advance about a cent a pound from mid-August to mid-September, but this year they declined 0.2 cent a pound. While butter was slightly lower in price, fresh milk prices went up 0.2 cent a quart, and cheese 0.7 cent a pound. On September 15 butter prices were 29 percent above a year ago, while milk and cheese were about 10 percent higher.

CREAMERY BUTTER production during August was 20 million pounds or 12.5 percent under August 1935, with heaviest reductions in the principal butter-producing States. Since the drought this year centered around the butter-producing areas, it was expected that butter production would be more unfavorably affected than other dairy products. Pastures in these areas were severely damaged by drought and on September 1 milk production per cow was the lowest on record. September rains have improved pastures but the outlook is still for continued low production.

MARKETINGS of meat animals at major stockyards during September increased over August and supplies are expected to continue relatively heavy during October. Peak marketing of lamb and beef usually occurs in October, at which time hog slaughter commences its seasonal up-swing.

SEPTEMBER receipts of cattle at major markets were slightly heavier than during August, but about 1 percent below a year ago. However, cattle prices increased slightly above a month earlier despite large supplies, partly as a result of increased consumer income reflected in a greater demand for beef. Better-grade cattle prices usually advance at this time of the year while prices of lower grades move down with heavier marketing of range cattle.

SIRLOIN and round steak prices to consumers went up 0.9 and 0.7 cent a pound from August 18 to September 15, while rib and chuck roast were 0.5 cent a pound higher. In spite of these increases retail beef prices were from 6 to 16 percent below last September's prices.

HOG RECEIPTS at seven markets during September were over 70 percent heavier than a year ago and slightly larger than during August. A large proportion of arrivals consisted of lightweight hogs from the spring pig crop with strictly finished hogs relatively scarce. Average weight of all hogs marketed during the week ending September 26 was 22 pounds below a year ago and this in part offset heavier receipts. As pointed out in previous issues of the GUIDE high corn prices are expected to cause the spring pig crop to be marketed earlier than usual, making slaughter supplies from October to December larger than average in relation to those from January to March.

RETAIL fresh pork prices jumped over 10 percent during the 4-week period, but smoked items as a group remained unchanged in price. On September 15 fresh pork was retailing at 1 percent below a year ago, while smoked ham was 5 percent lower and bacon 13 percent lower. During the

month loin roast advanced 3.2 cents to 32.9 cents per pound, while pork chops went up 3.8 cents to 39.5 cents per pound. From the middle to the end of September wholesale prices of loins at Chicago dropped over $5 per hundred pounds and the prospect is for lower pork prices. The farm price of hogs in mid-September was $9.68 per hundred pounds compared with $9.89 on August 15 and $10.29 a year earlier, when in addition packers paid a $2.25 processing tax. Compared with a year ago, and compared with September 1929, fresh pork cuts are relatively more expensive than beef.

LAMB MARKETINGS increased sharply during September and were about 15 percent above receipts a year ago. This supply situation represents considerable improvement over the first 4 months of the present marketing year--May to August--when Federally inspected slaughter was the smallest for the period since 1929.

LEG OF LAMB was the only lamb item to exhibit a retail price increase during the 4-week period, advancing 0.6 cent to 30.2 cents per pound. Rib chops declined about the same amount, while breast and chuck were unchanged in price. Lamb cuts in general are retailing at 5 percent above prices a year ago. On September 15 farmers were receiving $7.43 per hundred pounds for lamb compared with $7.59 in mid-August and $7.23 a year ago.

LATE POTATO shipments up to the end of September were 1,000 cars or 40 percent larger than a year ago. High prices have caused heavy marketings despite the fact that the late crop is expected to be 59 million bushels below last year's 319 million bushel crop. Heaviest shipments are arriving from Maine, Colorado, and Idaho with the Maine harvest expected to reach its peak in October.

RETAIL potato prices moved down 0.4 cent to 3.2 cents per pound during the month. Prices have declined 20 percent since mid-July, but potatoes are retailing at 94 percent above a year ago. While wholesale prices have been declining, the change has been less than seasonal, due to the small crop. Farm prices of potatoes dropped from 128.2 to 113.7 cents per bushel from August 15 to September 15. A year ago farmers were receiving 47.5 cents a bushel for potatoes.

EGG PRODUCTION on September 1 was 1.6 percent below the low production of September 1, 1935, when farm flocks had not recovered fully from the effects of the 1934 drought. The number of layers in farm flocks was larger than a year ago, but with the exception of 1934 egg production per hen was the lowest September 1 in 11 years. Further declines in egg production may be expected until the seasonal low point is reached in December.

RETAIL egg prices went up 1.8 cents to 40.9 cents a dozen during the month. Since this change was smaller than a year ago, eggs were selling at 2 percent below September 1935 prices. Farm prices of eggs exhibited less than seasonal price advances, going up from 22.4 to 24.5 cents per dozen in the same period.

RETAIL PRICES of all fresh vegetables except green beans, lettuce, and carrots declined during the month. Major changes occurred in sweetpotatoes and cabbage, which went down 1 and 1.8 cents per pound. Increase of 1.8 cents per head in lettuce prices was due to an agricultural strike in California, which curtailed shipments temporarily.

FAVORABLE August and September weather conditions improved late vegetable crop prospects and helped increase the acreage planted to early vegetables. Late onions and cabbage were especially benefited by the rains. Peak shipments of these crops occur in October.

KEEPING FRESH EGGS FRESH

[Concluded from page 11]

storage, some egg connoisseurs still find that new-laid eggs and storage eggs are different in taste and flavor. This does not mean that one type of egg tastes <u>better</u> than the other. Tasting tests have shown that some people prefer storage eggs to new-laid ones. But at any rate, the difference in taste and flavor is today much less noticeable than it was a few years ago. This is due largely to careful handling and the development of new methods of preparing eggs for storage. Research is still going on.

NEWS FLASH TO POULTRY CONSUMERS

Watch your markets during October and November for cheaper poultry. . . Due partly to drought, poultry farmers have been selling a larger than usual quantity of birds. . . Poultry storage stocks are close to double last year's supply . . . Poultry prices usually reach their low in December, but this year lower prices may come earlier. . . Farm and wholesale prices in late September and early October showed sharp drops.

Our Point of View

THE CONSUMERS' GUIDE believes that consumption is the end and purpose of production.

To that end the CONSUMERS' GUIDE emphasizes the consumer's right to full and correct information on prices, quality of commodities, and on costs and efficiency of distribution. It aims to aid consumers in making wise and economical purchases by reporting changes in prices and costs of food and farm commodities. It relates these changes to developments in the agricultural and general programs of national recovery. It reports on cooperative efforts which are being made by individuals and groups of consumers to obtain the greatest possible value for their expenditures.

The producer of raw materials—the farmer—is dependent upon the consuming power of the people. Likewise, the consumer depends upon the sustained producing power of agriculture. The common interests of consumers and of agriculture far outweigh diversity of interests.

While the CONSUMERS' GUIDE makes public official data of the Departments of Agriculture, Labor, and Commerce, the point of view expressed in its pages does not necessarily reflect official policy but is a presentation of governmental and nongovernmental measures looking toward the advancement of consumers' interests.

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